

# **Screening Number Development**

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**based on**

**SB 32**

**California Land Environmental Restoration  
and Reuse Act**

**(Escutia, Chapter 764, Statutes of 2001)**

## SB 32 Requires:

- The California Environmental Protection Agency (Cal/EPA), “in cooperation with the Department of Toxic Substances Control, the State Water Resources Control Board, and the Office of Environmental Health Hazard Assessment,” to publish a list of screening numbers for specific contaminants

# Purpose of this Section of SB 32

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- To speed cleanup efforts at Brownfields and other sites by allowing property owners and local officials to more easily estimate the extent and cost of remediation needed to get specific sites into a condition for new development

# Definition of Screening Numbers

- the concentration of a contaminant in soil, published by the agency as a human health protective reference value
- solely an advisory number, and has no regulatory effect
- be used by property owners, developers, citizen groups, etc. to estimate the degree of effort that may be necessary to remediate a contaminated property

# Source of Chemicals on the List

- **39** hazardous Chemicals--listed in Tables II and III of subparagraphs (A) and (B) of paragraph (2) of subdivision (a) of Section 66261.24 of Title 22 of the California Code of Regulations
- **5** halogenated hydrocarbon industrial solvents and **10** additional hazardous substances, identified by DTSC and SWRCB as the most common contaminants found at sites
- **Total 54**

# Basis for Selecting Methodology

- Risk assessment methodology that is consistent with “most stringent” US EPA “Superfund” methodology.
- Risk assessment methodology that is recommended by DTSC or SWRCB for evaluations at sites recently or currently assessed under their authority.

# Toxicity Criteria

- Whenever available, chronic reference exposure levels and carcinogenic potency factors published by OEHHA are used.
- When an appropriate OEHHA toxicity criterion is not available, a U.S. EPA toxicity criterion is used.

# Non-Volatile Chemical Draft Soil Screening Numbers

- Draft screening numbers are similar to US EPA Region 9 Preliminary Remediation Goals (PRGs), except where U.S. EPA and OEHHA toxicity criteria differ.
- Draft screening numbers are approximately fivefold higher than San Francisco Bay RWQCB Environmental Screening Levels (ESLs) due to the use of a safety factor to provide protection for exposure to more than one chemical
- OEHHA recommends a hazard index approach to provide protection against exposure to multiple chemicals.



# **Volatile Chemical Draft Soil Screening Numbers**

- Draft screening numbers are lower than current PRGs and ESLs.
- PRGs differ because indoor air contamination by soil gas was not considered in the calculations
- Draft screening numbers and RWQCB ESLs, based on soil gas, are similar in most cases.

# Issues for Consideration

- These screening numbers are only for human health protection and are not meant for protection of environmental health or water quality.
- Although suggested by a peer reviewer, a backyard garden scenario was not included.
- Four of the listed chemicals were not done for technical reasons.

# Next Steps

- Release the document for public review and comment March 12<sup>th</sup>
- Public workshops April 6<sup>th</sup> and 7<sup>th</sup>
- End of comment period April 16<sup>th</sup>
- Publish Screening Numbers in early May

# From May and Beyond

(As resources permit)

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- Participate in Cal/EPA workshops on the published Screening Numbers and update as necessary
- Preparation of a report on the feasibility of establishing screening numbers to protect water quality and ecological resources
- Participate in discussions on publication of a document on how to use screening numbers
- Add additional chemical screening numbers to the list